

CLAIMS

1. An airframe supported tent, comprising:

a tent structure; and

at least one pair of coupled airbeams, said at least one pair of coupled airbeams coupled to at least a first portion of said structure, said at least one pair of coupled airbeams including first and second airbeams, each said first and second airbeams of said at least one pair of coupled airbeams adapted for containing air, and when filled with air, for creating a semi-rigid frame member for said tent structure.

2. The airframe supported tent of claim 1, wherein said tent structure includes a canopy portion and a floor portion.

3. The air frame supported tent of claim 2 wherein said at least one pair of coupled airbeams is coupled to said canopy portion of said tent structure and extends from proximate a first region of said floor portion to proximate a second region of said floor portion.

4. The airframe supported tent of claim 3 wherein said at least one pair of coupled airbeams form an arcuate shape when inflated with air.

5. The air frame supported tent of claim 1 wherein each of said first and second air beams have an outer surface, and wherein said first and second air beams are coupled to one another approximate one region of their outer surface.

6. The air frame supported tent of claim 5 wherein said first and second airbeams are generally circular shaped and have a generally circular circumference, and wherein the first and second airbeams are joined proximate a tangent of each of their respective circumferentially shaped outer surfaces.

7. The air frame supported tent of claim 5 wherein said first and second airbeams are shaped in a shape selected from the group consisting of a square, a rectangle, a triangle, an octagon and a trapezoid.

8. The air frame supported tent of claim 5 wherein said at least one pair of coupled airbeams include first and second airbeams, and wherein each said first and second airbeams include an outer skin and an inner skin.

9. The air frame supported tent of claim 8 wherein said outer skin is made from a non-air-retaining material, and said inner skin is made from an air retaining material.

10. The airframe-supported tent of claim 8 wherein said outer skin and said inner skin are generally permanently coupled to one another.

11. The air frame supported tent of claim 9 wherein said inner skin and outer skin are separate structures and wherein said inner skin forms an air retaining bladder which may be removed from said outer skin of said air beam.

12. The airframe supported tent of claim 1, further including an airbeam interface, disposed proximate a region of said tent structure, said airbeam interface fluidly coupled to said first and second air beams, for allowing said first and second airbeams to be filled with air from said airbeam interface, and for allowing said first and second airbeams to be purged of air from said airbeam interface.

13. The airframe supported tent of claim 12, wherein said air beam interface is disposed proximate and exterior region of said tent structure.

14. An airframe supported tent, comprising:

a tent structure including a canopy portion and a floor portion;

at least one pair of coupled airbeams, wherein said at least one pair of coupled airbeams is coupled to said canopy portion of said tent structure and extends from proximate a first region of said floor portion to proximate a second region of said floor portion, each said first and second airbeams of said of at least one pair of coupled airbeams adapted for containing air, and when filled with air, for creating an arcuate shaped semi-rigid frame member for said tent structure; and

wherein said tent structure further includes an airbeam interface, disposed proximate an exterior region of said tent structure, said airbeam interface fluidly coupled to said first and second air beams, for allowing said first and second airbeams to be filled with air from said airbeam interface, and for allowing said first and second airbeams to be purged of air from said airbeam interface.

15. A manually operated air pump, comprising:

a pump formed of a fabric type material and having an inlet for allowing said pump to be inflated with the air, and an outlet adapted to discharge the air contained within said pump when said pump is compressed, said pump adapted to take on and generally maintain a generally flat shape when compressed.

16. The manually operated air pump of claim 15, wherein said inlet includes a one way valve preventing air from escaping said pump when said pump is compressed, and wherein said output includes a one way valve preventing air from escaping said pump when said pump is being inflated.

17. The manually operated air pump of claim 15, wherein said pump has a bellows shape.

18. The manually operated air pump of claim 15, wherein said pump further includes a secondary inflation valve.

19. The manually operated air pump of claim 18, wherein said secondary inflation valve serves a dual purpose of offering an interface for a source of air and for providing a moisture vent for an interior region of said pump.

20. A manually operated air pump, comprising:

a pump formed of a fabric type material and having an inlet for allowing said pump to be inflated with the air, and an outlet adapted to discharge the air contained within said pump when said pump is compressed, said pump adapted to take on a generally flat shape when compressed.

21. The manually operated air pump of claim 20, wherein said inlet includes a one way valve preventing air from escaping said pump when said pump is compressed, and wherein said output includes a one way valve preventing air from escaping said pump when said pump is being inflated.

22. The manually operated air pump of claim 20, wherein said bellows shaped pump is filled with foam, and wherein after said bellows shaped pump is compressed, said foam serves as a return mechanism causing said bellows to expand and fill with air through said inlet.

23. The manually operated air pump of claim 21, wherein said inlet includes a quick fill valve.

24. The manually operated air pump of claim 23, wherein said quick fill valve includes a "dump" type valve having a check valve portion.